

## EDUCATION

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<b>University of Ottawa</b> Honours Bachelor of Science, Computer Science	<b>Ottawa, ON</b> September 2020 - December 2024
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- **Relevant Coursework:** Artificial Intelligence, Software Requirements Analysis, Network Security, Information Retrieval, Operating Systems, Data Communication & Networking, Computer Architecture

## TECHNICAL SKILLS

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**Languages:** Python, Java, C, JavaScript, HTML/CSS, PHP, Go, Scheme (Racket), Prolog, YAML, Selenium (Web Automation)  
**Developer Tools:** Nokia NSP & NFM-P, GitHub, Power BI, SharePoint, WireShark, Power Automate  
**Libraries/Frameworks:** BootStrap, Django, React, NumPy, Pandas, Scikit-Learn, TensorFlow, Keras, OpenCV, PostgreSQL  
**Certifications:** Google Cloud Platform Certified

## WORK EXPERIENCE

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<b>Nokia</b> Network Automation Developer	<b>Ottawa, ON</b> September 2023 – December 2023
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- Led a router software upgrade validation project, reducing manual upgrade verification time and errors using **Nokia's Network Services Platform (NSP)**
- Developed automation scripts with **YAML** and **Python**, improving efficiency of upgrade deployments
- Designed and implemented a **Power App-based absence planner**, streamlining team scheduling
- Automated data storage and workflow processes using **SharePoint** and **Power Automate**, reducing manual entry errors

<b>Nokia</b> Network Automation Developer	<b>Ottawa, ON</b> January 2023 – April 2023
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- Automated key network performance reports using **NSP scheduling** and **Power BI**, reducing manual reporting effort
- Designed an interactive **Power BI dashboard** to visualize critical network data, improving monitoring efficiency
- Presented progress updates to management, providing step-by-step demonstrations to ensure clarity and adoption

<b>Nokia</b> Network Automation Developer	<b>Ottawa, ON</b> May 2022 – August 2022
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- Developed automation scripts in **Python** to optimize network configuration and reduce manual workload
- Earned **Google Cloud Platform certification**, enhancing cloud computing knowledge
- Gained hands-on experience with **Virtual Machines**, improving deployment and testing capabilities

## PROJECTS (Available on [GitHub](#) - <https://github.com/rajbadial>)

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- **Intro to Artificial Intelligence** – Studied fundamental AI concepts, including search algorithms, machine learning, and neural networks. Implemented AI-driven solutions for classification and optimization problems.
  - **Hand Tracking Project** – Developed a real-time hand tracking system using OpenCV and MediaPipe in Python. Designed to recognize and track hand gestures for interactive applications.
  - **Information Retrieval** – Implemented a search engine utilizing indexing and ranking techniques. Applied TF-IDF and vector space models to retrieve and rank relevant documents efficiently.
  - **JIA Option Map (Honours Project)** - Improved the usability and accessibility of a web application designed to assist youth with Juvenile Idiopathic Arthritis in tracking pain levels and exploring treatment options. Source code is private but the official website is <https://jiaoptionmap.ca/>

## LEADERSHIP EXPERIENCE

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<b>Logischool</b> Trainer	<b>Ottawa, ON</b> September 2021 – August 2022
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- Taught high school students foundational coding skills in a JavaScript-based environment
- Designed engaging lessons, increasing student participation and understanding of programming concepts
- Guided students through debugging exercises, improving problem-solving skills